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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,365	07/10/2003	Adam Joe Shuttleworth	16333-US	1500

7590

07/13/2005

William M. Dixon  
Patent Department  
DEERE & COMPANY  
One John Deere Place  
Moline, IL 61265-8098

EXAMINER

NGUYEN, CHI Q

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/617,365	<b>Applicant(s)</b> SHUTTLEWORTH ET AL.	
	<b>Examiner</b> Chi Q. Nguyen	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

This Office action is in response to the applicant's invention filed on 7/10/2003.

#### ***Claim Objections***

Claims 2 and 6 are objected to because of the following informalities: the citation "the distance" does not have antecedent basis. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Manning (US 3,192,805).

In regard claim 1, Manning shows in figures 5-6, a joint structure comprising a first structural member having a channel 15, the channel having a first wall, a second wall 11a. The second wall generally opposite the first wall and a third wall (base) connecting the first and second walls, the third wall being disposed at an acute (less than 90-degree) angle to the first wall and at an obtuse (greater than 90-degree) angle to the second wall (see figure 6); a second structural member having a tongue portion 10 for matably engaging the channel of the first structural member, the tongue portion having a first wall, a second wall 10a. The second wall generally opposite the first wall, and a third wall (base) connecting the first and second walls, the third wall being disposed at an obtuse angle to the first wall and at an acute angle to the second, the

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angle of the third wall of the channel being opposite that of the channel being opposite that of the third wall of the tongue portion (figure 5).

In regard claim 6, Manning teaches the claimed invention as stated wherein further including a cross sectional area between the tongue portion and the channel is larger on one side than on the other when the tongue portion is matably received in the channel (see figure 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manning '805.

In regard claims 2-5, and 7-10, Manning teaches the claimed invention as stated. However, Manning does not specifically teach a distance between the first wall of the channel and the first wall of the tongue portion is at least twice the distance between the second wall of the channel and the second wall of the tongue portion; wherein the angle of the first wall of the tongue portion parallel with and equal or greater than the angle of the first wall of the channel; and wherein the angle of the third wall of the channel is greater than the angle of the third wall of the tongue portion by at least 2-degree. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have specific distance for first wall of the channel and the tongue portion is at

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least twice the distance for the second wall of the channel and the tongue portion, the angle of the first wall of the first wall of the tongue portion is parallel with and equal/greater than the angle of the first wall of the channel, and the angle of the third wall of the channel is greater than the angle of the third wall of the tongue portion by at least 2-degree, since it has been held that where the general conditions of a claim are disclose in the prior art, discovering the optimum or working ranges involves only routine skill in the art. The motivation for doing so would have been to provide a gap for adjusting distance in relation to clamping objects' sizes. Furthermore, Manning discloses the basic claim structures of the instant application but does not disclose specific dimension (the angle of the third wall of the channel is greater than the angle of the third wall of the tongue portion by at least 2-degree, etc.), therefore it would have been an obvious design choice to use the dimensions such as specified in these claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Frashour, Brown, Rownd, Gregoire, Charbonneau, Hecht, and Knauseder teach joint structures.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Chi Q. Nguyen whose telephone number is (571) 272-6847, Mon-Thu (7:00-5:30), Fridays off or examiner's supervisor, Carl Friedman can be reached at (571) 272-6842. The examiner's right fax number is (571) 273-6847.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197.

6/30/05

CN  
CQN

*Basil Katchevs*

BASIL KATCHEVS  
PRIMARY EXAMINER

7/11/05